PR4

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,511	10/03/2000	Elliot Omiya	MSFT-0231/160306.1	5346

7590 04/25/2003

Peter M Ullman
Woodcock Washburn Kurtz
Mackiewicz & Norris LLP
One Liberty Place 46th Floor
Philadelphia, PA 19103

EXAMINER	
STEELMAN, MARY J	
ART UNIT	**PAPER NUMBER**
2122	5

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/678,511	OMIYA ET AL.	
	Examiner	Art Unit	
	Mary J. Steelman	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/11/00, 01/08/01,01/18/01* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 October 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-50 are pending.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 01/18/01 was filed after the mailing date of the Application on 10/03/2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to because:

Fig. 4: Sequential Code 410(1) should be 401(1).

Sequential Code 410(n) should be 401(n).

See page 15, line 15 and page 16, line 4.

Fig. 12, #1201 - #1204 are missing in the drawing.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

Fig. 1, #195 is not in the Specification. See page 10, line 3.

Fig. 3, #303, 304, 305 are not in the Specification.

Fig. 10, #1001 is not in the Specification. See page 22, line 20.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. A suggested replacement is "Architecture Supporting Event Handling and Querying Customized Objects in a Database."

6. The abstract of the disclosure is objected to because:

Page 9, line 9: Recites "...bus 121by...", should be --...bus 121 by...--

Page 9, line 21: Recites "computer 20", should be –computer 110--.

Page 10, line 3 recites "interface 190", should be –interface 195--.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 27-37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 27-37 refer to software per se. The system fails to include any hardware upon which software is operating. This can be corrected by stating the database is on a computer readable medium or otherwise tangibly embodied (i.e. stored in a memory).

Claim 37, note a database in of itself, does not store data.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-4, 13-17 and 21-30** are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,237,135 to Timbol.

Per claims 1, 22-24, 27, and 28:

-a base object having: internal logic executable on a computing device, said internal logic causing aid computing device to perform one or more actions, said one or more actions including the signifying of one or more events; and a public object model which includes identifiable references to said one or more events; and a customization object having: data or logic representative of said public object model; and an event handler which receives the signified events from said base object, and which invokes at least one customized code sequence based on said data or logic. (Timbol: Col. 9, lines 64-67, "The present invention provides a wizard-based tool which automatically generates code to define property setters and getters, accessor methods, event listener and registration mechanisms and the like.")

Per claims 2, 14, and 25: (Timbol, col. 6, lines 57-60, "...the client executes a "compiled"...program which has been created by compiling...source code...")

Per claims 3, 22, 27-29, and 30: (Timbol, col. 16, lines 23-25, "The user can also make the bean a listener for events that occur in other components...", col. 16, lines 64-67, "...if the user

wants the component to respond in some way to such an event, the user simply writes the code that respond within the body of the KeyPressed() method...", col. 21, line 12, "...user event occurring in the IDE triggers the process.")

Per claim 4: (Timbol: Col. 15, line 58, "...adds the following three fire <event> methods...")

Per claims 13 and 17: (Timbol: Col. 7, lines 5-9, "...loader will unpack different sections of a file and instantiate in-memory corresponding data structures. The class loader will invoke itself recursively for loading any superclasses of the current class which is being unpacked.")

Per claim 15: (Timbol: Col. 19, lines 16-17, "An Enterprise Java Bean is a non-visual bean that runs on a server." Also, Livingston: See fig. 1.)

Per claims 16 and 26: (Timbol: Col. 6, lines 24-25, "Software system which is stored in system memory and / or on disk storage...")

Per claim 21: (Timbol: Col. 21, lines 14-18, "This includes information about the collection of files, class path, class loader location, and the like, for the current project under development. This allows the wizard to determine...where a reference that occurs in a file may be located." Also Livingston: Col. 5, line 66- col. 6, line 3, "The EAM stores the units of information in a relational database, such as a conventional SQL Server. The database stores attributes...provide a mechanism for sorting, filtering, and categorizing...")

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. **Claims 5-10, 34-39, and 43-50** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,237,135 to Timbol, in view of U.S. Patent 6,424,979 to Livingston et al.

Timbol disclosed a component based, application development system to included customizable objects. Timbol failed to disclose supporting information concerning the database and queries thereon. However, Livingston disclosed a remote server database for an enterprise. User queries are processed from customized components of the database through event handling.
Per claims 5 and 44: (Livingston: Abstract, lines 7-11, "The interface provides the user's selection of desired information within the portal in the form of a page request that is converted into queries of a database that seek content satisfying the type, level of detail and time frame attributes of the request." Also, col. 4, lines 23-25, "Each component is represented with varying levels of detail and multiple time frames allowing the view of the architecture to be customized based on user preferences.")

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified Timbol's component based application development system to included information on database storage / queries as disclosed by Livingston, because components are typically stored, accessed through databases, and manipulated in response to events (Timbol: col. 16, lines 23-67), in enterprise (Timbol: col. 20, line 7) systems.
Per claims 6 and 34: (Livingston: Col. 11, lines 50-67, "...generator compares the user's request (time dimension, level of detail, etc.) to the attributes stored in the XML tags that mark the tree's components, and only returns the information contained within tags whose attributes match the desired dimensions. The generator accomplishes this by using one or more queries...XML page generator sends out queries...")

Per claim 7: (Livingston: Col. 5, line 66- col. 6, line 3, "The EAM stores the units of information in a relational database, such as a conventional SQL Server..." Also, col. 12, line 16-17, "Rules such as those in a style sheet are incorporated by reference...")

Per claim 8: (Livingston: Col. 7, lines 52-55, "...the relational database also allows the EAM to store custom viewing preferences and configurations for each user of the architecture..." Also, col. 10, lines 55-60, "...user positions his...mouse...on an active link...and clicks...This action invokes ...hyperlink behavior...loads a new page...or activates a procedure through a script command assigned to the event handler...The system then retrieves...")

Per claim 9: (Livingston: Col. 6, lines 25-30, "Applications processing the XML data can then present a subset of those units by matching the attributes with the need expressed by the user...XML enables the logical assembly of the more detailed set of information." Also col. 12, lines 58-62, "Preferably, every section in the EAM has an owner and an expiration date. When a section reaches the expiration date, a notification agent initiates the workflow by sending an e-mail reminder of the section owner.")

Per claims 10 and 34: (Livingston: Col. 11, line 67-col. 12, line 13, "XML page generator sends out queries requesting information...XML...queries the content database...The XML page generator receives the information it previously requested")

Per claims 35 and 36: (Timbol: Col. 19, lines 16-17, "An Enterprise Java Bean is a non-visual bean that runs on a server." Also, Livingston: See fig. 1.)

Per claims 37 and 43: (Timbol, col. 6, lines 57-60, "...the client executes a "compiled"...program which has been created by compiling...source code...")

Per claims 38, 39, 44, 48, and 50: (Timbol: Col. 9, lines 64-67, "The present invention provides a wizard-based tool which automatically generates code to define property setters and getters, accessor methods, event listener and registration mechanisms and the like.")

Per claims 45 and 46: (Timbol: Col. 10, lines 31-33 and 51-52, "...Java Bean is a public Java class that has a constructor with no parameters. Java Beans usually have properties, methods, and events, that follow certain naming conventions also known as "design patterns". Also, Livingston: Col. 18, lines 56-65, "...a user needs to access information about the hardware and software standards...To find the hardware and software standards, the user then chooses ...)

Per claim 47: (Timbol: Col. 10, lines 31-33 and 51-52. Also Livingston: col. 18, lines 56-65.)

Per claim 49: (Timbol: Col. 6, lines 24-25, "Software system which is stored in system memory and / or on disk storage...")

12. **Claims 11, 12, 18-20, 31-33, and 40-42** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,237,135 to Timbol, in view of U.S. Patent 6,424,979 to Livingston et al., and further in view of U.S. Patent 6,370,531 to Boutcher et al.

Timbol disclosed a component based, application development system to included customizable objects. Timbol failed to disclose supporting information concerning the database and queries thereon. However, Livingston disclosed a remote server database for an enterprise. User queries are processed from customized components of the database through event handling. Together Timbol and Livingston did not provide extensive information on naming conventions. It is well known it the art to name files, components, etc. using information based on the environment, and various groups associated with the file. Boucher disclosed information typical of naming conventions (moniker) used in object programming.

Per claims 11, 12, 18, 19, 20, 31, 32, and 40: (Col. 3, lines 1-36.) "In the conventional UNC, a path is built up using three components including a server name, a share name and the file path..." Also, "the following UNC name is used to cause the data in the server file to be converted to UTF8 encoding..." (example of software object invoking).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time of the invention, to have modified the invention of Timbol, to include database and query information as provided by Livingston, and to have further modified the invention to include information on the naming (moniker) conventions used for identifying customized modules because the universal naming convention is well known in the art and supplying meaningful names for objects or modules is a logical manner for storing and accessing data through queries.

Per claims 33, 40, 41 and 42: (Livingston, Col. 18, lines 10-55, "The first layer has a naming convention of...")

Per claims 40, 41 and 42: (Livingston: Fig. 1 and col. 9, lines 39-49, "...The request is provided to a web server which requests the needed information from an object server...")

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Steelman, whose telephone number is (703) 305-4564. The examiner can normally be reached Monday through Thursday, from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703) 308-4789.

The fax phone numbers are (703) 746-7240 for regular communications and (703) 746-7239 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MS

04/18/2003

ANIL KHATRI
PRIMARY EXAMINER